

# Laser SLAM Counter Balanced Stacker Automatic Forklift

## SFL-CPD15-T



**Compatible with Various Pallets**  
Applicable both for 3-stinger pallet and field pallet



**Long Life Battery**  
Meeting various working requirements with overall battery life over than 10h



**Lifting Height Up to 3M**  
Customized lifting height with the maximum support of 6m



**Pallet Recognition**  
Recognition with higher accuracy for precise forking



**3D Obstacle Avoidance**  
360° full protection

Real Laser SLAM

Full Protection

Flexible Dispatching

Better Adaptability

Automatic Charging



### Technical parameters

Productmodel	SFL-CPD15-T
Productname	Laser SLAM counterbalanced automatic forklift
Dynamicform	Electric
Drivingmode	Automatic navigation, car driving
Navigationtype	Laser SLAM
Tray type	3-stringerpallet/ Field pallet
Rated load capacity	1500kg
Load centre distance	500mm
Wheelbase	1098mm
Dead weight(with battery)	2325kg
Navigationpositionaccuracy [1]	±10mm
Navigationangle accuracy [1]	±0.5°
Fork in-positionaccuracy [1]	±10mm
Standardlifting height	3300mm
Gantryheight	4208mm
Fork surface ground clearance (at the lowest position)	45±5mm
Navigationlaser scanning height	2300mm
Vehicle size: length* width* height	2555*1150*2326mm
Fork size: length* width* height	950*110*40mm
Fork outer width	460-750mm
Right-angle stacking channel width, pallet 1000x1200 (1200 placed across forks)	3600mm
Right-angle stacking channel width, pallet 800x1200 (1200 placed along the fork)	3500mm
Map Area (Single)	≤ 400000m²
Minimumturningradius	1710mm

### Performance parameters

<b>Driving speed: full load/no load</b>	1.2/1.5m/s
<b>Lifting speed: full load/noload</b>	95/120mm/s
<b>Descent speed: full load/noload</b>	120/85mm/s
<b>Gantry movement speed: full load/no load</b>	/mm/s
<b>Passability (slope/step/gap)(2)</b>	<5%/20mm/30mm
<b>Drivemotorpower(S2, 60 min)</b>	1.5kW
<b>Lifting motorpower(S3, 15%)</b>	3kW
<b>Steering motorpower(S2, 10min)</b>	0.165kW
<b>Service brakingmode</b>	Electromagneticbrake
<b>Drive control mode</b>	Servo control

### Wheel parameters

<b>Tyre type: drive wheel/support wheel</b>	Polyurethane/Polyurethane
<b>Tire size: drivingwheel</b>	/mm
<b>Tire size: bearingwheel</b>	/mm
<b>Tire size: Balance wheel</b>	/mm
<b>Wheel number: driving wheel (x= driving wheel/ bearing wheel)</b>	1X-2/2
<b>Wheelbase: bearingside</b>	909mm
<b>Wheelbase: drivingside</b>	608mm

### Battery parameters

<b>Battery specifications</b>	24/270 (Lithium Iron Phosphate)
<b>Battery weight</b>	230kg
<b>Comprehensive battery life</b>	10h
<b>Chargingtime (10%-80%)</b>	2.5h
<b>Chargingmethod</b>	Manual/Automatic
<b>Battery cycle number</b>	>2000

### Certifications

ISO 3691-4	×
EMC/ESD	✓
UN38.3	✓
RoHS	✓
REACH	✓

### Function configurations

<b>Lidar number</b>	1 (P+FR2000)+3 (OLEILR-1BS2)
<b>Wi-Fi roamingfunction</b>	✓
<b>3D obstacle avoidance(3)</b>	0
<b>Remoteemergencystop (4)</b>	0
<b>Pallet recognition(3)</b>	0
<b>Cage stack (3)</b>	0
<b>Highshelf pallet recognition(3)</b>	0
<b>Pallet damage detection(3)</b>	0
<b>Pallet stacking and unstacking(5)</b>	0
<b>The HMI screen</b>	✓
<b>Fork toothdistance sensor</b>	✓
<b>Cargo weightdetection</b>	0

### Safety configurations

<b>E-stop button</b>	✓
<b>Sound and light indicator</b>	✓
<b>Braking distance: 1m/s / 1.5m/s</b>	≤30 / ≤50cm
<b>Vehicle hardware fault detection</b>	✓
<b>360° laser protection</b>	✓
<b>Bumperstrip</b>	✓
<b>High safety protection of fork teeth</b>	✓

### Others

<b>Network</b>	4G  5G / Wi-Fi 802.11 a/b/g/n/ac
<b>Ground flatness</b>	±5mm/m²
<b>Scenario requirements</b>	Onlysuitable for indoor,lightintensity: ≤40 klx (IEC 61496-3), groundwithout water and oil and otherscenes
<b>Ambient temperature and humidity range</b>	TEMP: 0-50 / RH: 10-90, no compression, no condensation
<b>IP rating</b>	IP20
<b>Noise near driver's ear according to EN12053</b>	≤70B(A)

Dimension(mm)

